

Elkton Road, Maryland State Line to Delaware Avenue

Alternatives Development

October, 2005

Area 1 – Maryland State Line to SR 4

Common Improvements

- Otts Chapel – add a second WB left turn lane
- Otts Chapel – Extend the westbound left turn lane from 380' to 500'
- Otts Chapel – WB left turn protected only phase. Eliminate left turns on flashing red.
- Otts Chapel – Extend the EB Elkton Rd right turn bay from 300 ft to 500 ft
- Haskell Rd – increase the WB LT storage lane from 350' to 425'
- SR 4 – Extend the EB Elkton Rd right turn bay from 270 ft to 420 ft (need to relocate the driveway from the vacant lot at the southeast corner)
- SR 4 – Increase the WB Elkton Road left turn bay from 400' to 550'
- SR 4 – Change the southbound left turn storage bay from 225' to 325'
- Off road shared use (ped and bike) path on south side of Elkton Road
- Crosswalks at all intersections with pedestrian signal-head to cross Elkton Road
- Sidewalk connections on south side of Elkton Road
- On road bike lane crossing the intersections in conjunction with shoulders for bike use on both sides of Elkton Road
- Added a connection between the shoulder and the shared use path on EB Elkton Road close to the Maryland border line
- Construct bus pads at all bus stop locations. Make sidewalk connections from the bus pad to the nearest intersections.
- Add right turn island at Haskell Road intersection.

Alternative 1

- Mainline – 4 lane section
- Otts Chapel – Increase the length of merging lane for NB Otts Chapel Road traffic along EB Elkton Road
- SR 4- Increase the length of the merging lane for NB SR 4 traffic along EB Elkton Road (almost 800')

Alternative 2

- Mainline - 6 lane section (from Otts Chapel Road to SR 4)
- Right turn from Otts Chapel Road becomes the third EB Elkton Road through lane and drops east of SR 4
- WB Elkton Road third through lane starts at east of SR 4 and drops as a left turn lane at Otts Chapel road intersection
- On road bike will not be allowed on EB Elkton Road at Otts Chapel Road intersection. Instead a connection from the shoulder to the shared use path will be provided on the west and east side of the intersection.

Alternative 3

- Mainline – 6 lane section from east of SR 4 to east of Haskell Road
- EB Elkton Road third lane starts east of Haskell Road and drops east of SR 4
- WB Elkton Road third lane starts east of SR4 and drops east of Haskell Road

Area 2 – SR 4 to W. Park Place

Common Improvements

- Casho Mill Rd – increase the EB Elkton road left turn lane from 550' to 650'
- Add shared use (ped and bike) path on south side of Elkton Road between SR 4 and Gravenor Lane
- Added on road bike lane, whenever appropriate, crossing the intersections in conjunction with shoulders for bike use on both sides of Elkton Road
- Construct bus pads at all bus stop locations. Make sidewalk connections from the bus pad to the nearest intersections.
- Improve signing on service road for bicycles and pedestrians
- Improve sight distance at Thorn Lane – relocate fence
- Remove the pedestrian crossing at Lincoln Lane intersection
- Thorn Lane – increase the green time along Thorn Lane/Short Lane
- Thorn Lane – extend the WB left turn lane by 75'
- W Park Place – allow WB U-turn and improve NB right turn by acquiring ROW from the southeast corner property. Change NB right turn lane from 30' to 100'
- Lincoln Drive – Close the median opening on Elkton Road and make Lincoln Drive as a right-in right-out only intersection
- Close the median opening at Chrysler Avenue Intersection
- Lower grade on WB approach to Casho Mill to improve sight distance
- Crosswalks at all intersections with pedestrian signal head to cross Elkton Road
- Add crosswalk at O'Daniel Avenue

Alternative 1

- Permit SB left turns at Casho Mill Road
- Casho Mill Road – Keep the EB left turn phase as existing (protected with permissive)

Alternative 2

- Casho Mill Road - Change the signal phasing and make it a two phase instead of a three phase signal
- Casho Mill Road - Change the EB left turn phase to protected only instead of protected plus permissive phase

Alternative 3

- In addition to 2, add a second eastbound Elkton Road left turn lane towards Casho Mill Road. Change the eastbound left turn storage bay to 350' instead of 650'
- Lane shifts on EB and WB Elkton Road at Casho Mill Road intersection

Area 3 – W. Park Place to Delaware Avenue

Common Improvements

- Apple Road - add a separate SB right turn lane (210' bay length)
- Apple Road – add WB right turn lane (135' bay length)
- Apple Road – Increase the left turn storage length for EB Elkton Road from 190' to 250'
- Rittenhouse Road – Prohibit WB left and U-turn from Elkton Road
- Rittenhouse Road – close the additional access point south of Elkton Road between Sunoco and Park and shop
- Amstel Avenue – Keep only one EB through lane crossing Amstel Avenue towards Delaware Avenue

- Install ADA compliant curb ramps at all driveway locations
- Improve pedestrian crossing at Amstel Avenue intersection by taking different measures; relocate the ped push button as close to crosswalk as possible, use textured pedestrian crosswalk
- Provide 5' sidewalk whenever possible
- Provide continuous bike lane facilities through Delaware Avenue
- Added on road bike lane, whenever appropriate, crossing the intersections in conjunction with shoulders for bike use on both sides of Elkton Road
- Construct bus pads at all bus stop locations
- Construct bus shelters on the north side of Elkton Road at Delaware Avenue and Amstel Avenue intersection
- Add bus pull off area on WB Elkton Road west of Apple Road in front of municipal building.

Common Improvements (for Alternatives 1 and 2 only)

- Provide 8' shared shoulder/bike lane on Elkton Road from Murray Road to Amstel Avenue
- Amstel Avenue - Create single EB thru and dedicated right turn lane; Create single WB thru lane and dedicated left turn lane
- Amstel Avenue - Increase the median refuge island on Elkton Road

Alternative 1

- Mainline – 3 lane section w/ center turn lane from Apple Road to Amstel Avenue
- Apple Road – increase the left turn storage length for WB Elkton Road from 85' to 120'

Alternative 2

- Mainline – 2 lane section w/ median and left turn lanes from Apple Road to Amstel Avenue
- Mainline – Add westbound LT at Beverly Road, Delaware Dance and the art center parking garage
- Apple Road – increase the left turn storage length for WB Elkton Road from 85' to 160'

Alternative 3

- Mainline – 4 lane undivided (same as existing) without any 4' median between Apple Road and Amstel Avenue
- Provide 5' shared shoulder/bike lane on Elkton Road from Murray Road to Amstel Avenue